

Var. GRANDIS Blytt, Enum. Pl. vasc. Christ. 21 (1844). *A. alpestris* Schmidt, Fl. Boëmica inchoata, Cent. III. 88 (1794); Lindb. fil. l. c. 127 (1909). *A. vulgaris* **alpestris* Murbeck, Bot. Notiser (1895) 266. *A. vulgaris* δ *alpestris* Briquet in Burnat, Fl. Alp. marit. III. 149 (1899).—Specimens examined. LABRADOR: l'Anse au Loup, August 21, 1892, *Waghorne*, Herb. Geol. Survey Canada, no. 8073. QUEBEC: Little Métis, August 15, 1898, *Mrs. Brodie*, Herb. Geol. Surv. Can., no. 19,513; *J. Fowler*, July 24, 1906.

RARE PLANTS IN GROTON, MASSACHUSETTS.

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THE town of Groton lies in the northwestern part of Middlesex County, Massachusetts, the second town south of the New Hampshire line. It is full of most interesting glacial deposits. A series of eskers and kames obstruct the drainage in the eastern part of the town, and enclose a chain of kettle-hole ponds. In the center of the town is a group of large drumlins, almost perfectly symmetrical, and to the west the land slopes down into a broad sand-plain, through which the Nashua and Squannacook Rivers flow, but little below the level of the plain.

In general, the flora is of the dry-woods, sand-plain type, but the drumlins and adjacent land are more fertile. Here the chestnut is a common tree. I have found in Groton the following plants which are of special interest. Three of them I have already announced in a previous article (RHOD. IX, 11-15, 1907) but the additional information here may be of interest.

In September, 1905, I discovered a single plant of *Linaria genistae-folia* Mill. by the railway embankment half a mile above the village. No other specimens were in sight, and I supposed the plant to be a waif. On October 9 of this year, however, I was surprised to find several good specimens along the Willow Road near the railway station. Later in the day I found a large colony on both sides of the highway, and spreading into an orchard, near my original station. There were at least 150 plants here, all in good flower and fruit. This plant is given in the sixth edition of Gray's Manual on the basis of

a station on the northern part of Manhattan Island. Britton's Manual (1901) gives the plant and this station, adding "now nearly or quite obliterated" so this Groton station seems to be a new and separate introduction from Europe. The plant is in several characteristics quite different from *Linaria vulgaris*, and is not likely to be confused with it. The habit of the plant is different, as it has several slender branches and is less leafy, with wider leaves than its congener. The flowers are lemon yellow, the "butter" without much of the "eggs." They are smaller, with a conspicuous sharp-pointed spur 7–10 mm. long. The capsules are 2.5–4 mm. in diameter, with slender pedicels 6–9 mm. in length.

Prof. K. M. Wiegand has recently called my attention to a specimen of *Amelanchier sanguinea* (Pursh) DC. in my herbarium. This I collected May 13, 1905, on an esker in the eastern part of the town, where it grew near *Epigaea* and *Hepatica triloba* in the shade of white pines. This shrub is a pronounced calciphile, and has been found in calcareous regions in Maine, Vermont, and western Massachusetts, but this is the first report in this State from east of the Connecticut River, and from a region not definitely calcareous.

Another shrub which often frequents limestone regions is abundant in the low land near Baddacook Pond close by, though very rare elsewhere in the county. This shrub is *Potentilla fruticosa* and was reported from this station by Dr. C. W. Swan in the Middlesex Flora (1888).

Lappula virginiana is abundant in thickets along the roadside over a mile from the village, where it has every appearance of being part of the original flora.

Another most interesting discovery this fall consisted of several medium-sized trees of *Betula nigra*. These grew on a gravelly knoll in a pasture between the village and the Groton School, fully two miles from the Nashua River. There was a straggling growth of *Betula populifolia* and white pines with these trees. This station is so far from the regular home of the species along the Merrimac, and in such dry soil as to suggest that the trees have been introduced. The tree is frequently set for ornament, but the pasture is too far from houses to make that likely in this case.

HINGHAM, MASSACHUSETTS.